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JUN 13 2007

AMENDMENTS TO SPECIFICATION

Please amend the indicated paragraphs of the specification in accordance with the following particulars:

Page 6, line 4 to line 20:

With reference to FIG. 3, there is shown a structure constructed in accordance with the invention comprising a display panel 300, a scan driver 310, a timing generator 320, and a data driver 330. Each component will be described in detail below. The display panel 300 comprises a plurality of pixels 301. A plurality of scan lines 340 are interconnected the scan driver 310 and the pixels 301 of the display panel 300. Likewise, a plurality of data lines 350 are interconnected the data driver 330 and the pixels 301 of the display panel 300. In the embodiment, preferably, the display panel 300 is an LCD panel. The timing generator 320 is adapted to generate an optimum PAC (polarity arrangement control) ~~signals~~ signal and send the same to the data driver 330. Each PAC signal corresponds to one of a ~~plurality~~ plural sets of polarity data polarities. As such, the data driver 330 is able to select one of a ~~plurality of~~ plural sets of predetermined polarity data based on the PAC signal. Thus, the polarities of the pixels 301 of the display panel 300 can be controlled. As a result, it is possible of decreasing cross-talk and improving display quality. As to how the timing generator 320 generates the optimum PAC ~~signals~~ signal will be described in detail below.

Page 6, line 21 to page 7, line 6:

With reference to FIG. 4, the timing generator 320 according to a first preferred embodiment of the invention

comprises a storage unit 3211, an operation unit 3212, a comparison unit 3213, and a counting unit 3214. Preferably, the operation unit 3212 is comprised of an adder 32121 and a control circuit 32122 in the embodiment. Preferably, the storage unit 3211 is implemented as a random access memory (RAM) for storing the ~~plurality of plural~~ sets of polarity data and the ~~plurality of plural~~ PAC signals, ~~i.e., the optimum PAC signals~~. Further, each set of polarity data comprises a ~~plurality of plural~~ data polarities. Furthermore, each set of polarity data corresponds to one PAC signal. In this example, there are 2^N PAC signals corresponding to 2^N sets of polarity data, and each set of polarity data has k data polarities, where N is employed to denote the PAC signal. Preferably, there are 16 sets of polarity data (N=4) and there are 300 data polarities (k=300) in the embodiment.

Page 7, line 20 to page 8, line 4:

The operation unit 3212 is adapted to receive display data representing a voltage vector of no polarity in which the larger of the value of display data the closer to 10V or 0V the voltage will be. The operation unit 3212 is also adapted to receive one of a ~~plurality of the plural~~ sets of polarity data ~~vectors~~ in the storage unit 3211 and a corresponding PAC signal (e.g., a first set of polarity data ~~vector~~). The ~~element~~ elements of the set of polarity data ~~vector is~~ are data polarity polarities in which the corresponding element of the ~~vector~~ set of polarity data is +1 when the data polarity is positive and on the contrary, the corresponding element of the ~~vector~~ set of polarity data is -1 when the data polarity is negative (step S501).

Page 8, line 5 to page 8, line 18:

Next, the operation unit 3212 uses the adder 32121 to perform an inner product operation with respect to the set of polarity data ~~vector~~ and the display data ~~vector~~ for obtaining an absolute value of the inner product as a result. That is, the result corresponds to a sum of coupling voltages of the PAC signal ~~signals~~ of the set of polarity data ~~vector~~. For example, the result is +4 (step S502). The result then is sent to the comparison unit 3213 for comparing with a predetermined value (e.g., +5). It means that the coupling value of the corresponding PAC signal of the set of polarity data (i.e., the absolute value of the sum of coupling voltages) is smaller if the result is smaller than the predetermined value per the comparison in the comparison unit 3213. As an end, it is possible of decreasing cross-talk and improving display quality. Finally, the comparison unit 3213 outputs the PAC signal to the data driver 330 so that the data driver 330 is able to control the polarity arrangement of liquid crystal of the display panel 300 in response to the PAC signal (step S503).

Page 8, line 19 to page 9, line 10:

The comparison unit 3213 will output an enable signal to the counting unit 3214 for incrementing the counting unit 3214 by one ~~(+1)~~ if the result is larger than the predetermined value. Accordingly, the storage unit 3211 is able to sequentially output a second set of polarity data ~~vector~~ and the corresponding PAC signal to the operation unit 3212 (step S504). Next, the operation unit 3212 performs an operation with respect to the new set of polarity data ~~vector~~ and the display data for obtaining a corresponding sum of coupling voltages (step S502). Next,

the corresponding sum of coupling voltages is sent to the comparison unit 3213 for comparing with the predetermined value again. The above loop will end once the sum of coupling voltages of the set of polarity data ~~vector~~ is smaller than the predetermined value. Subsequently, the comparison unit 3213 sends the corresponding PAC signal of the set of polarity data ~~vector~~ to the data driver 330 (step S503). The corresponding PAC signal of the set of polarity data ~~vector~~ having the smallest sum of coupling voltages will be outputted if the sum of coupling voltages of each of all sets of polarity data ~~vectors~~ is larger than the predetermined value.

Page 9, line 11 to page 9, line 24:

A flow chart of a second preferred embodiment of the invention is illustrated in FIG. 8 in conjunction with FIG. 7. The block diagram of FIG. 7 is similar to that of FIG. 4 except that the counting unit 3214 is not required. The process of FIG. 8 begins in step S801 in which the operation unit 3212 receives display data ~~vector~~ and the storage unit 3211 stores the plural sets of polarity data ~~vector~~. The operation unit 3212 then performs an inner product operation with respect to each set of the polarity data ~~vector~~ and the display data ~~vector~~ for obtaining an absolute value of the inner product as a result. The result corresponds to a sum of coupling voltages of each set of polarity data ~~vector~~ (step S802). The result then is sent to the comparison unit 3213 for comparing with each other so as to choose the set of polarity data ~~vector~~ having a smallest sum of coupling voltages and the corresponding optimum PAC signal. As an end, it is possible of decreasing cross-talk. Finally, the comparison unit 3213 outputs the chosen PAC signal to the data driver 330 (step S803).